

1. METHODOLOGY

a. Sample Design – Katchi Abadis

To conduct the pilot study, four districts from two provinces were selected. The districts include:

Sindh: Karachi-West, Korangi & Malir

Punjab: Lahore

The sampling design with the districts is kept consistent with the regular ASER survey. Keeping Katchi Abadi pilot's methodology consistent with regular ASER methodology provided grounds for comparisons with the annual citizen-led household survey on educational status and learning assessments of children in Pakistan. However, a limitation is that ASER methodology has to rely on government's lists on population and housing units in a block, the total of which changes every year. For that limitation in data made public by the government, ASER cannot use population based weighted averages for calculating district level findings. To fix that, ASER takes fixed number of households from each village/Katchi Abadi, and the number of villages/Katchi Abadis from each district is also fixed. In total, ASER selects 600 households from each district. ASER's calculations with 2017 census data show that for taking a representative sample from any district, a sample of 600 households should be much above the required figure even with the annual population growth. That helps ASER resolve two challenges: a) not knowing exact population of a district or village in any given year, and b) during data cleaning if data of any households needs to be dropped, the overall sample would still be above the estimated figure, making the data representative at district level.

Total Population: The total population of this pilot survey consists of 4 urban districts of Pakistan. Sampling within each district is described below:

Sampling Frame: Each district is provided with

- A Katchi Abadi list.
- Data from the Katchi Abadi Directorate/Authority of Punjab and Sindh on the total number of households.
- Total population of each Katchi Abadi in the list.

Sample size and its Allocation:

- Keeping in view the variability of the key variables, population distribution and field resources, a total sample of 600 households pertaining to 20 households from each Katchi Abadi is being used.
- Sample primary sampling units (PSUs) have been considered sufficient to produce reliable estimates with 5% margin of errors at 95% level of confidence.
- The detailed allocation plan is shown below:

Number of Districts	Number of Katchi Abadis per District	Number of Households per Abadi
4	30	20

Sample Design: A two stage sample design was adopted:

First stage: 30 Katchi Abadis selected using the Katchi Abadis lists from Katchi Abadi Authority in Sindh and Katchi Abadi Directorate in Punjab.

Second stage: 20 households are selected in each of the 30 selected Katchi Abadis.

Selection of Primary Sampling Units (PSUs):

Following ASER’s methodology, Katchi Abadis of districts have been taken as PSUs. A mixture of regularized, non-regularized and unlisted abadis was sampled. Katchi Abadis which have been issued a No Objection Certificate (NOC) for occupancy rights transfer are called regularized or notified abadis. But the Katchi Abadis that do not have an NOC are legally categorized as non-regularized or non-notified. Finally, some abadis are not in government’s lists due to their recent development or a temporary setup (temporary ones are shanties or Jhuggis).

Selection of Secondary Sampling Units (SSUs): Households have been treated as secondary sampling units (SSUs).

- Based on actual households in each sample PSUs, 20 households have been selected.
- We divide the Katchi Abadi into four parts:
 - In each of the four parts, starting from the central location every 5th household is selected using the left hand principle in a circular fashion till 5 households are selected from each part.
- Generally, ASER surveys also include 1 government and 1 private school from each village. However, due to Covid related school closures, schools could not be surveyed for the Katchi Abadi pilot study.

b. What to do in the Katchi Abadi

- Contact Katchi Abadi Elder/Influencer/s: Introduce yourself to the Katchi Abadi elder, councilor and/or to other senior members of the Katchi Abadi to inquire about its origins, evolution, walking to its key sites and understanding its unique features. Share information about yourselves and the ASER survey. This initial walking and talking may take an hour. Get the approximate number of households in the Katchi Abadi from the Councilor.
- It is often helpful to first draw all the roads or paths coming into the Katchi Abadi and going out of the Katchi Abadi. It helps to first draw a rough sketch on the ground so that people

around you can see what is being done. Mark hamlets, schools, households etc. with landmarks. With the help of the community members, identify different hamlets and their center point.

- Talk to people: Contacting Katchi Abadi elder and other people should help fill out the Katchi Abadi data sheet. The sheet requires to note down the Katchi Abadi name, its population, area, location, number of households, major professions, ethnicities of residents, road structure, electricity, gas, water, drainage, sewerage, hospitals, and schools.

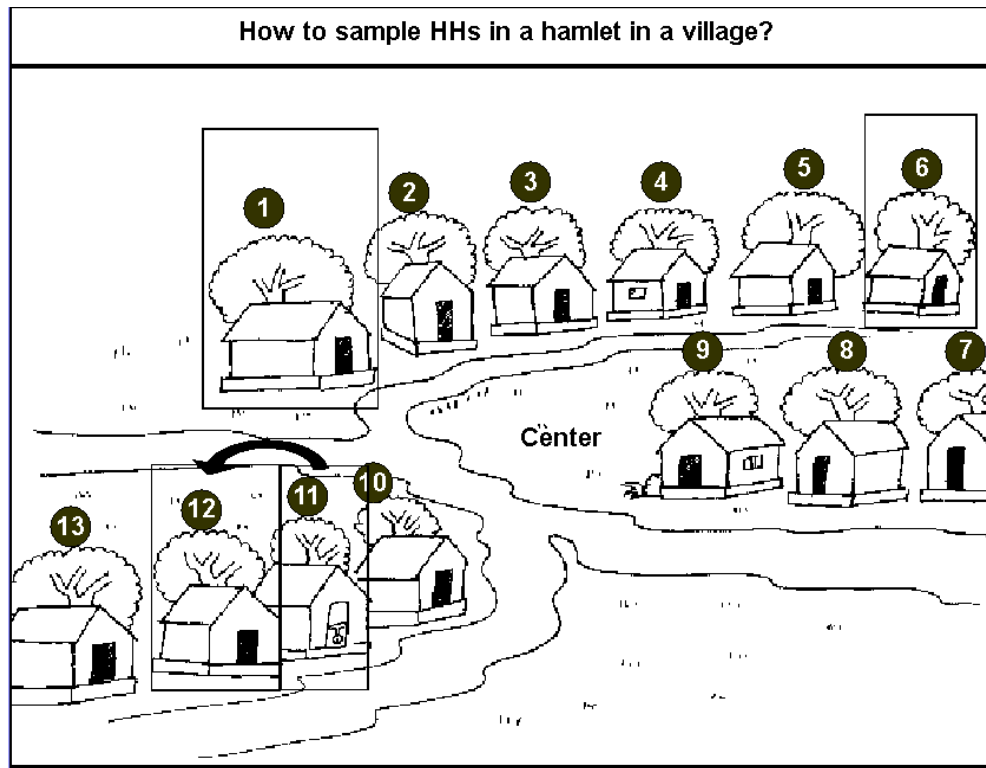
HOW TO SELECT HOUSEHOLDS

- In the entire Katchi Abadi, information will be collected for 20 randomly selected households.
- Go to each hamlet/section. Try to find the central point in that habitation. Stand facing the houses in the center of the habitation. Visit every 5th house from the left-hand side in the habitation (e.g., 1st house, 11th house, 16th house, etc.). Get information about the household and children following instructions in the next section.
 - House Closed: If the selected house is closed or if there is nobody at home, note that down on your compilation sheet as “House Closed”. This household DOES NOT count as a surveyed household. Move to the next/adjacent open house. Continue until you have 5 households in each hamlet/section in which there were inhabitants.
 - No Response: If a household refuses to participate, note that down on your compilation sheet as “No Response”. However, as above, this household DOES NOT count as a surveyed household. Move on to the next house. Continue until you have 5 households in each hamlet/section in which not only were the inhabitants present, but they also participated in the survey.
 - No Children: If there are no children or no children in the age group of 3–16 years in a household but there are inhabitants, **INCLUDE THAT HOUSEHOLD**. Take all the relevant information like the name of the family head, age and education related information of the mothers, if any. Such a household **WILL COUNT** as one of the 5 surveyed households in each hamlet/section.

Stop after you have completed 5 households in each hamlet/section. If you have reached the end of the section before 5 households are sampled, go around again using the same every 5th household on the left-hand side rule. If a surveyed household gets selected again, then go to the next household. Continue the survey till you have 5 households in the section.

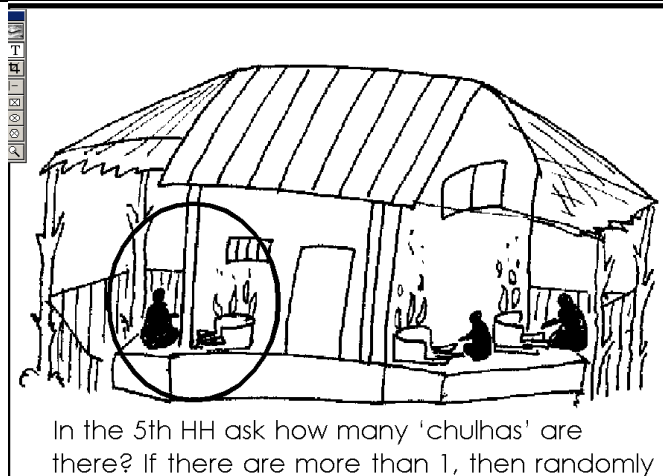
- Now move to the next selected hamlet/section. Follow the same process.
- Make sure that you go to households **ONLY WHEN** children are likely to be at home. This means that the day of the household survey should be a Sunday or holiday.
- If every house is turning out to be a No Response house, think about your team and strategy. It may be because there are two male members going to the houses hence refused permission.

Figure 2.2.1. How to sample HHs in a hamlet



Instructions:

1. Find central point in a hamlet. Stand facing the dwellings.
2. Survey every **5th HH** (household) occurring on the **Left-Hand Side**.
3. In case of a locked HH or if there is nobody at home, note that down as '**House Closed**' and move to the next open house.
4. If a HH refuses to participate, note that down as



In the 5th HH ask how many 'chulhas/kitchens' are there? If there are more than 1, then randomly select any one of the 'chulhas/kitchens'. After completing survey in this house proceed to the next 5th HH.

‘No Response’ and move to the next HH.

5. If there are no children or no children in the age group of 3 -16 years in a HH but there are inhabitants, include that HH.

6. If you reach the end of the hamlet before five (5) HHs are sampled, go around again using the “every 5th HH rule”.

c. What to do in each Household

Introduce yourself to the respondent and tell them about ASER survey. Be polite in your manner of speaking and ensure that the household understands that participation is voluntary and that the information gather will be analyzed anonymously and collectively with other households’ responses. Once the respondent gives permission to be surveyed, begin with the questions on the household sheet.

Basics of the household sheet: Following is some basic information required to be filled in the household sheet before the start of the survey.

- **Katchi Abadi identification:** Carefully fill out the relevant name of the Katchi Abadi, tehsil/taluka, district and province.
- **Date and Time:** Write down the date, day, start & end time on the day of the survey visit.
- **Surveyors:** Write down the names of the surveyors.
- **Household ID:** Write the household number (e.g. 1, 2, 3,....20)
- **Name of Family Head:** write down the name of **Family head.**
- **Gender of the Family Head:** Mark the gender of the family head male or female. Tick only one option
- **Name & Gender of the respondent:** write down the name & gender of the respondent.
- **Is respondent the head of the household?** Ask if the respondent is also the head of the household and mark the response in yes or no.
- **Years in Katchi Abadi, Migrated from and Migration type:** How long have the family been living in the katchi Abadi, did they migrate from rural to urban or urban to urban area and finally, is the migration type seasonal or permanent.

In Each Sampled Household: We will note information about the household and all the children (3-16 years), their mother and father who live in the household on a regular basis.

Household with multiple kitchens: If there is more than one kitchen (chulhas) in the selected household, then randomly select any one of the kitchens in the household and record the total number of family members who eat from that chosen kitchen.

- **Children 3 to 4:** On the household sheet, note down child's name, age, whether they are attending Kachi or any other form of pre-school centre. **We will NOT test children who are under 5 years of age.**
 - Ask all children in this age group their current schooling status, meaning whether the child is currently enrolled in kachi or any other school, dropped out of school or was never enrolled in any school.
 - Ask all (enrolled and dropped out) children if they take any private supplementary tuition (paid classes in addition to regular school).
 - Also ask the enrolled children if they go to the specific school which you have/will be surveying.
- **Children 5 to 16:** On the Household sheet, note down child's name, age, gender and all other details.
 - Ask the current schooling status of each child, i.e., whether the child is currently enrolled in school, dropped out of school or was never enrolled in any school.
 - If the child is enrolled then note down the class which the child is attending at the time of the survey and the type of school each child is going to, i.e., government, private, madrassah or any other type of school.
 - Ask all (enrolled and dropped out) children if they take any private supplementary tuition (paid classes in addition to regular school).
 - Also ask the enrolled children if they go to the specific school which you have/will be surveying.
 - **All children in this age group (5 to 16) will be tested in basic reading, arithmetic and English.** (We know that younger children will not be able to read much or do sums but still follow the same process for all children so as to keep the process uniform). Ensure that the child is comfortable before and during the test and that sufficient time is given to each child.
 - **Parents' Education: Following information regarding parents' education will also be recorded**
 - Total number of Children (0-16)
 - Whether mother and/or father have gone to school?
 - Mother and/or father's education (Highest class completed)
 - Is the mother a working woman?
 - Do not take information if the father is dead.

Out of school children (drop outs and never enrolled children)

- Ask the child if s/he has dropped out and the last class that was passed. Also ask for the reason of dropping out or being never enrolled (such as law and order, poverty, flood, school building shifted by government or others).
- Even the dropped out and never enrolled children aged 5 to 16 have to be tested.

OTHER THINGS TO REMEMBER:

- **Non-resident children:** Do not survey children who are visiting their relatives and friends in the sampled Katchi Abadi.
- **Older children:** Often older girls and boys (in the age group 11 to 16) may not be thought of as children. Be sensitive to this issue and therefore avoid using words like “children”.
- **Children out of the Katchi Abadi:** If there are children in the family but who are not present in the Katchi Abadi during the survey, do not take their details.
- **Mothers under or 16 years of age:** Often in Katchi Abadis, you can come across mothers who are less than 16 years of age. Information on them will be collected as a mother as well as a child between the age 5 to 16 years, and they will also be tested in all three assessments.

*Many children may come up to you and want to be included in the process out of curiosity. Do not discourage these children. You can interact with them. But concentrate on the fact that data must be noted down **ONLY** for children from households that have been randomly selected.*

Household Indicators: All information on household indicators is to be recorded based, as much as possible, on observation and evidence. However, if for some reason you cannot observe it then note down what is reported by the household. This information is being collected in order to link education status of the child with household economic conditions.

Land Tenure Status (House Ownership): Do residents have ownership of the house, have some stamped document, encroaching private or public land, or paying rent?

Type of house the child lives in: Types of houses are defined as follows:

- **Kutchra House:** The walls and/or roof of which are made of material which includes un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc.
- **Semi -Pucca house:** A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.
- **Pucca House:** A pucca house is one, which has walls and roof made of the following material.
Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc. Roof Material: Tiles, GCI (Galvanized Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.

Type of Floor and Type of Roof: With your observation mark the most relevant option for each question.

HH Members with the Same Kitchen: Write down the **number of male and female identifying members** eating from the same kitchen. This includes children also. Then write members **above 65 years of age, number of physically challenged persons in the house, members with a chronic disease (such as cancer, TB, AIDS), total earning members and, total earning members below the age of 18.**

Type of Employment: Whether the employed members of the household are self-employed, salaried, daily wagers or casual laborers. Mark all that apply.

Total rooms in the household: write the number of rooms excluding toilets.

Toilet Facility & Functionality: Is the toilet shared or public or do the households have their own toilet. Do the toilets have flush tanks, service toilet, or just a pit? Mark the relevant option.

Source of clean drinking water: ask the participants how they get clean drinking water and mark the appropriate response. If the response is not given in the options, write it down in the “other” option.

Electricity Connection: Mark yes or no by observing if the household has wires/electric meters and fittings or not.

Solar Panel: Mark yes or no by observing if the household has solar panel facility available

Television – TV in the household: Mark yes if the household has a TV set otherwise mark No.

Radio: Mark yes if the household has a Radio set otherwise mark No

Computer/Laptop/Tablet: Mark yes if the household has either computer, laptop or tablet, otherwise no.

Internet Connection: Mar yes if the household has internet connection available, otherwise No.

Means of Communication: Mark yes if the household has simple phone, smartphone, and can do SMS and use WhatsApp, in the respective ‘yes’ boxes.

Vehicle owned by the households (Mention in numbers): Mention the number under the label “car” and “motorbike” if it is owned by the household.

Mother tongue: Ask the respondent of *mother tongue of the children of the household* and write it down.

Religion: Ask the religion of the respondent and write it down. Be very respectful and polite in asking this question.

Social-Safety Net Recipients:

Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Benazir Income Support Program**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

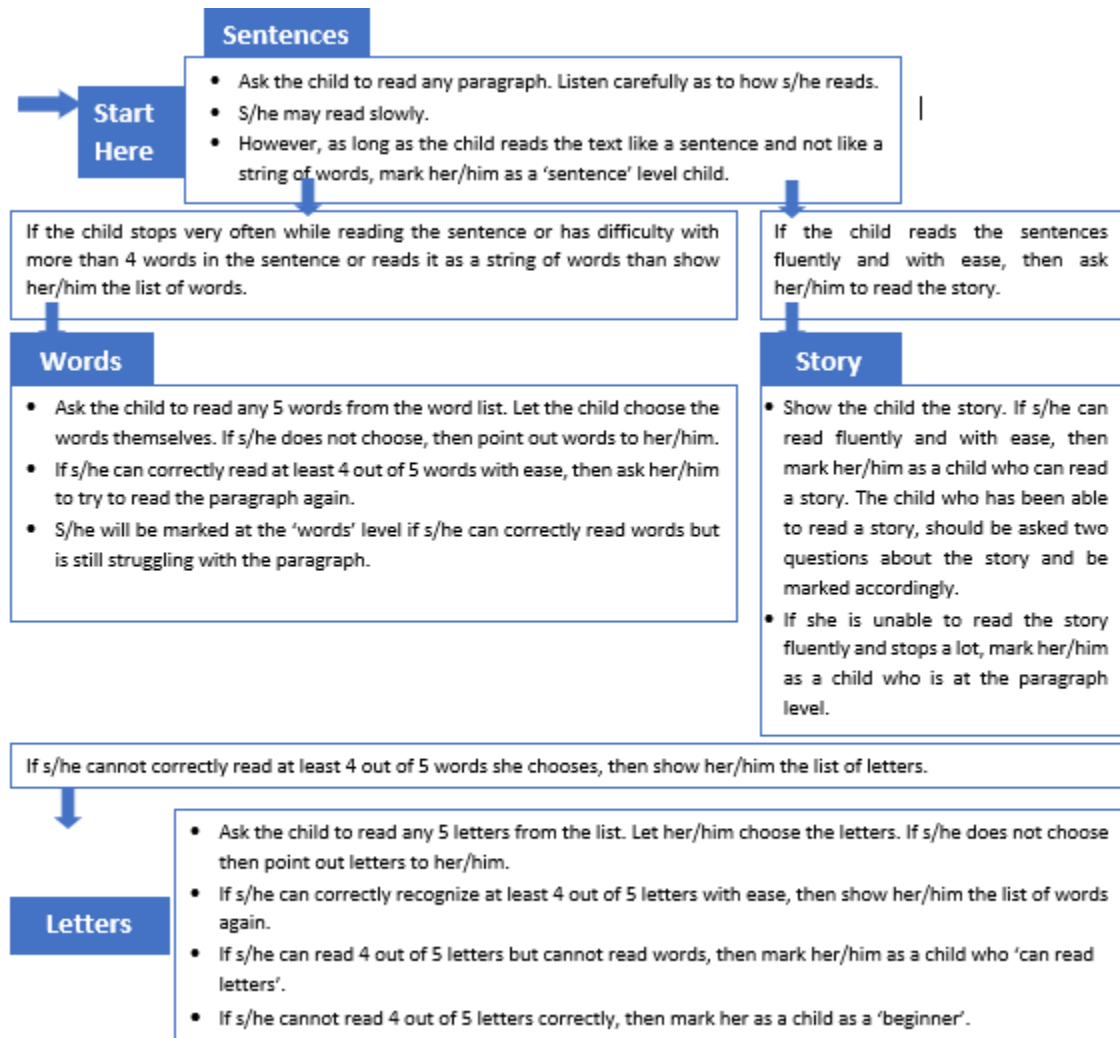
Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Ehsaas**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Punjab Social Protection Authority**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

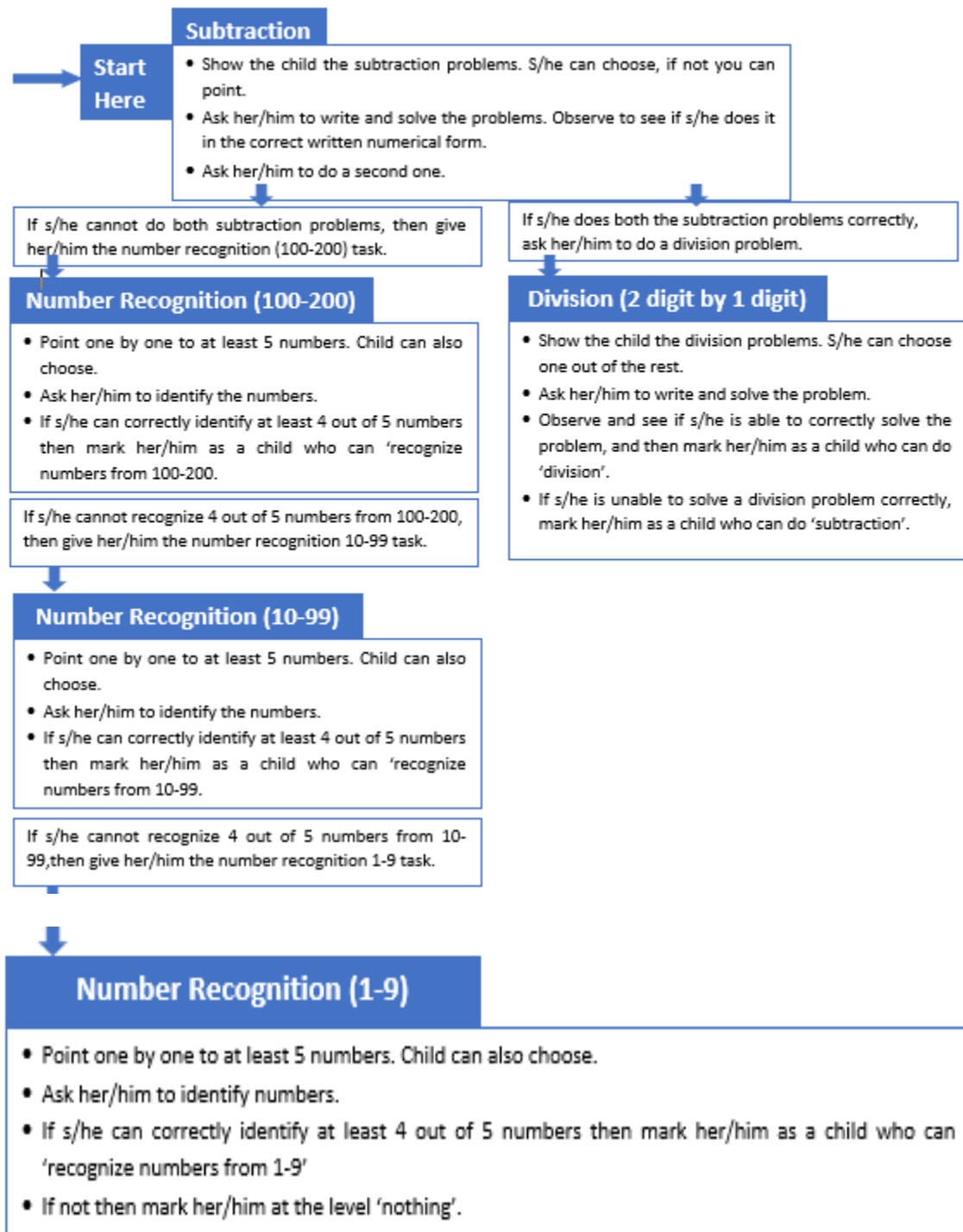
Are you recipient of any cash transfer/safety-net cash/Interest Free Loans from **Akhuwat**? If you have received any cash then mark 'Yes' otherwise mark 'No'.

Once the household information has been gathered from the respondent, then do a one on one assessment for all children aging 5 to 16 who live regularly in the household. The criteria for conducting the assessment are shared below:

HOW TO TEST READING?



HOW TO TEST ARITHMETIC?

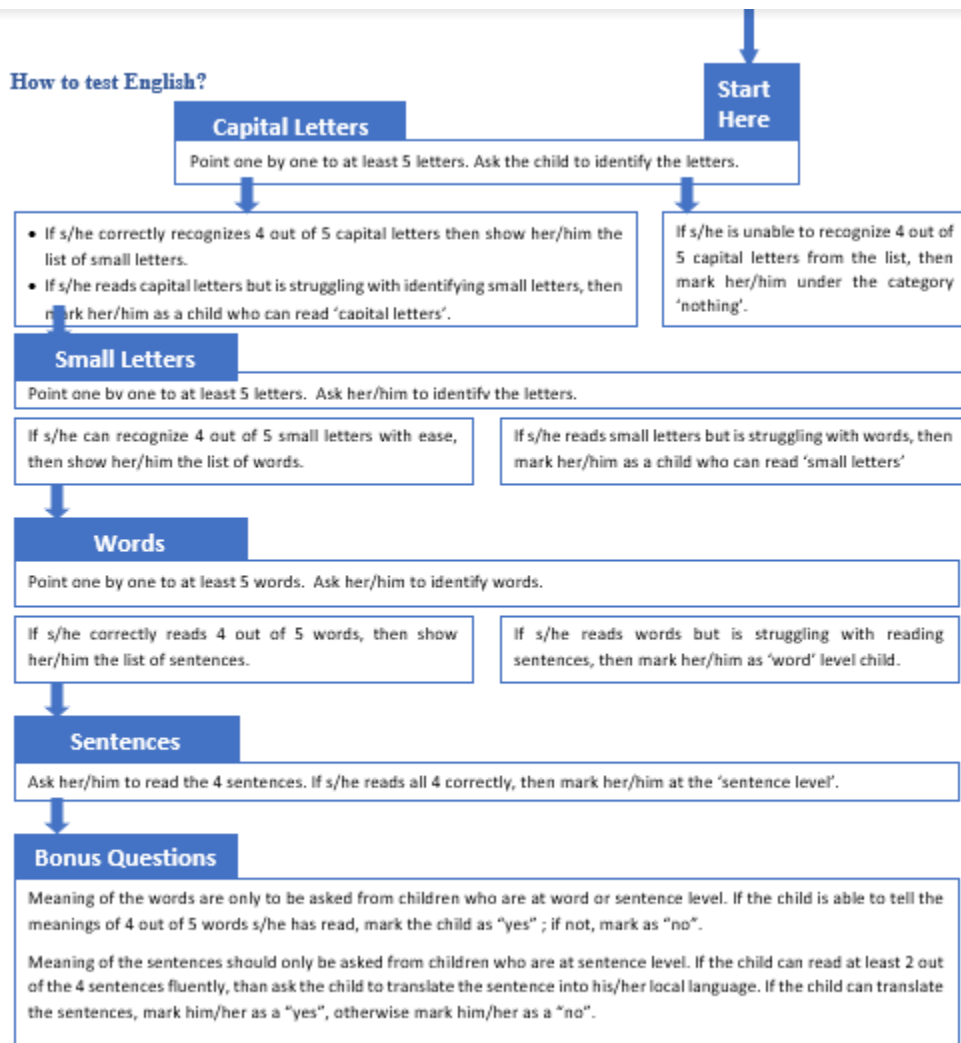


Word Problems

Show word problems to all children (5-16 years). S/he has to answer all three questions.

- Ask her/him to tell the time in the clock, if S/he answers correctly then mark as "can tell" otherwise mark as "cannot tell".
- Ask her/him to solve the problem # 2 and #3 on a piece of paper.
- Watch what s/he does.
- If s/he is able to follow the right method and solve with the right answer, then mark her/him as a "can do" for each word problem otherwise mark her/him as "cannot do".
- Ask at least one child from each household to do at least one word-problem at the back of the household sheet.

HOW TO TEST ENGLISH?



HOW TO TEST GENERAL KNOWLEDGE?

How to test General Knowledge?

ENGLISH

This section should only be asked from children who are at "Word" level on English Tool.

- a) Ask the child to see the picture and then ask two questions from the child. Mark "yes" if the child answer correctly, otherwise mark as "no".
- b) Ask the child to complete the sentences by identifying the picture of the items drawn on the sample. If a child answers any two correctly, mark him/her "yes", otherwise "no".

Psycho-Social Wellbeing of the Children

In addition to the learning assessment of children, the pilot study also adapted and aimed to explore the psycho-social wellbeing of the children. For that purpose, Stirling Children's Wellbeing Scale¹ was used. The scale is meant to be applied to children from the age of 6 to 16. It is a 15 item scale. These 15 items are given below:

	Statements	Never	Not much of the time	Some of the time	Quite a lot of the time	All of the time
1	I think good things will happen in my life	1	2	3	4	5
2	I have always told the truth	1	2	3	4	5
3	I've been able to make choices easily	1	2	3	4	5
4	I can find lots of fun things to do	1	2	3	4	5
5	I feel that I am good at some things	1	2	3	4	5
6	I think lots of people care about me	1	2	3	4	5
7	I like everyone I have met	1	2	3	4	5
8	I think there are many things I can be proud of	1	2	3	4	5
9	I've been feeling calm	1	2	3	4	5
10	I've been in a good mood	1	2	3	4	5
11	I enjoy what each new day brings	1	2	3	4	5
12	I've been getting on well with people	1	2	3	4	5
13	I always share my sweets	1	2	3	4	5
14	I've been cheerful about things	1	2	3	4	5
15	I've been feeling relaxed	1	2	3	4	5

The scale has 3 sub-scales: Positive Emotional scale, Positive Outlook Scale and Social Desirability Sub-scale. These are shared below:

¹ https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/using/faq/scwbs_children_report.pdf

Wellbeing Sub-components and Related Items

Wellbeing Sub-Component	Item	Related Item on the SCWBS
Positive Emotional State	9	I've been feeling calm
	14	I've been feeling cheerful about things
	15	I've been feeling relaxed
	10	I've been in a good mood
	12	I've been getting on well with people
	11	I enjoy what each new day brings
Positive Outlook	8	I think there are many things that I can be proud of.
	5	I feel that I am good at some things
	1	I think good things will happen in my life
	4	I can find lots of fun things to do
	6	I think lots of people care for me
	3	I've been able to make choices easily

Each item is scored 1 to 5.
 The minimum for the scale is 12 and the maximum 60.
 Currently the mean average score is 44 with 50% of all scores within the range of 39 and 48.

Social Desirability Sub-Scale

	Item	Related Item on the SCWBS
	2	I have always told the truth
	7	I like everyone I have met
	13	I always share my sweets

Each Item is scored 1 to 5.
 Overall scores of 3 or 14/15 on this sub-scale would indicate that the participant's wellbeing scores should be treated with caution.

Research Ethics

Idara-e-Taleem-o-Aagahi (ITA) ensures adherence to strict standards of research ethics. From pre-testing to training, data collection, monitoring, data analysis and report writeup, standardized ethical protocols are followed at every step of the way. Internal discussions, consultations and pretesting allows us to test the sensitivity of newly added questions. That way before launching the questionnaires to the larger public, any sensitive question is adequately amended or even removed. Then, during the training sessions of enumerators, one session is devoted to research ethics. Enumerators are trained on how to introduce themselves to the residents and how to conduct themselves. Enumerators are thoroughly trained on ensuring that the households be made clear on the following: participation in the survey is completely voluntary, no harm will come upon them if they refuse to participate, and that if they choose to participate, their names or any other personal

identifying information shall be kept confidential, and the responses will only be analyzed collectively to estimate the aggregate. This process is further ensured during the monitoring of data collection. Additionally, this year's training as well as data collection also ensured strict following of COVID-19 SOPs which is a key reason why schools could not be surveyed for this pilot study.

The findings from Katchi Abadis of 4 districts are shared in the next chapter.